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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/772,070

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Shinichi Nakano

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01/15/2008

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EXAMINER

LEUNG, JENNIFER A

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

01/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/772,070

Applicant(s)

NAKANO ET AL.

Examiner

Jennifer A. Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007 and 02 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Jennifer A. Leung
1/13/2008

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 2, 2007 has been entered.

Response to Amendment

2. Applicant's amendment submitted on August 2, 2007 has been carefully considered. The changes made to the specification are acceptable. Claims 1 and 8 are withdrawn from consideration. Claims 2-7 and 9 are under consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 2-5, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bausche et al. (US 6,299,906) in view of Kaga (JP 61-293536).

Regarding claims 2-5, 7 and 9 Bausche et al. (see FIG. 1; column 4, line 41 to column 5, line 56) discloses an apparatus comprising:

at least a reactor (i.e., dissolution unit/vessel **3**), a jet mechanism (i.e., nozzle **9**), and a mechanism including a pressure reducing device (i.e., a conduit containing pressure regulator **7**) connected with and located between the reactor **3** and the jet mechanism **9**;

the reactor comprising an inlet (i.e., at the base of the vessel **3**) for passage of a fluid into the reactor; a material carrier (i.e., a container **4** comprising sinter plates **5**); and an outlet (i.e., at the top of the vessel **3**) for discharging the fluid containing dissolved material therein;

the jet mechanism **9** ejecting the fluid containing the dissolved material into an open region of an open chamber (i.e., in precipitation unit/vessel **8**), for forming particles therein.

The apparatus of Bausche et al. is the same as the instantly claimed apparatus, except that Bausche et al. is silent as to the material carrier **4** being configured as the instantly claimed material carrier, wherein the carrier comprises a plurality of meshes, wherein the carrier comprises a stirring mechanism incorporated therein, and wherein the carrier rotates together with the stirring mechanism, and thereby also functions as a stirring mechanism.

Kaga (see FIGs. 1-3; Abstract) teaches a vessel (i.e., casing **12**) used for dissolving a solid material in a fluid, wherein the vessel contains a material carrier **30** comprising a plurality of meshes, wherein the material carrier **30** has a stirring mechanism (i.e., impellers **46**) incorporated therein, and wherein the carrier **30** rotates together with the stirring mechanism **46** (i.e., by rotation of shaft **16**), and thereby also functions as a stirring mechanism.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute the material carrier/stirring mechanism as taught by Kaga for the material carrier 4 in the apparatus of Bausche et al., because the material carrier/stirring mechanism would help shorten the required dissolving time, as taught by Kaga (see Abstract).

It is noted that Bausche et al. discloses that the sinter plates 5 are sized so that they retain the solid material within the container 4, but allow free flow of the fluid (see column 4, lines 45-51). Accordingly, it would have been obvious for one of ordinary skill in the art at the time the invention was made to similarly configure the sizing of the plurality of meshes of the material carrier/stirring mechanism, so that the solid material was retained within the carrier, but fluid was allowed to pass, as specifically required by Bausche et al.

Furthermore, although Bausche et al. discloses that the apparatus is used for processing biologically active compounds, and not developer materials, the apparatus still meets the claims, since expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim, *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969), and the inclusion of a material or article worked upon by a structure being claimed does not impart patentability to the claims. *In re Young*, 75 F.2d 966, 25 USPQ 69 (CCPA 1935); *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963). Claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bausche et al. (US 6,299,906) in view of Kaga (JP 61-293536), as applied to claim 2 above, and further in view of Inoue (EP 526 699).

Kaga (see Abstract and figures) is silent as to the material carrier 30 being configured to

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rotate in reverse relative to the rotation direction of the stirring mechanism **46**. Inoue, however, teaches a material carrier **24** comprising a stirring mechanism **21** therein, wherein the carrier **24** is capable of being rotated in reverse relative to the rotation direction of the stirring mechanism **21** (see arrows in FIG. 4). It would have been obvious for one of ordinary skill in the art at the time the invention was made to configure the material carrier/stirring mechanism in the modified apparatus of Bausche et al. so that the material carrier rotated in reverse relative to the rotation direction of the stirring mechanism, because one having ordinary skill in the art would recognize that the increase in shearing force, as taught Inoue (see, e.g., column 5, lines 11-24), would predictably enhance the dissolution of the solid material in the fluid.

Response to Arguments

5. Applicant's arguments with respect to claims 2-7 and 9 have been considered but are moot in view of the new ground(s) of rejection, necessitated by amendment.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer A. Leung/
Examiner, Art Unit 1797
January 13, 2008